

## WHAT IS CLAIMED IS:

1. A light-catalyst mechanism of an air cleaner, comprising  
a plurality of light tubes disposed in front of an air passage of a main  
5 body of the air cleaner within a holding room of the air cleaner;  
a filtering honeycomb net disposed in the holding room; the filtering  
honeycomb net having titanium dioxide applied over it;  
a supporting frame fixedly disposed in the holding room so that  
elongated spaces are formed between it and edges of the main body;  
10 the supporting frame having gaps thereon; the light tubes being  
securely fitted in the gaps of the supporting frame at two ends thereof;  
wires, which connect the light tubes to a power supply, being hidden  
in the elongated spaces; and  
a separating frame disposed around the supporting frame to cover the  
15 elongated spaces and to keep the light tubes and the filtering  
honeycomb net apart.
2. The light-catalyst mechanism of an air cleaner, wherein the separating  
frame has stopping protrusions thereon, which are fitted into  
respective ones of the gaps of the supporting frame to ensure  
20 separation of the filtering honeycomb net from the light tubes.